## WHAT IS CLAIMED IS:

1	1. A nucleic acid molecule comprising:		
2	an RNA polymerase III promoter sequence;		
3	a short RNA encoding sequence comprising a transcription initiation site;		
4	a STOP cassette comprising an RNA polymerase III-specific termination sequence,		
5	first loxP sequence and a second loxP sequence, wherein the loxP sequences flank the		
6	termination sequence, and wherein the termination sequence is disposed between the		
7	promoter sequence and the transcription initiation site of the short RNA encoding sequence		
8	in the nucleic acid molecule; and		
9	optionally the short RNA encoding sequence overlaps with one of the loxP		
10	sequences.		
11			
12	2. The molecule of claim 1, wherein the first loxP sequence is a wild-type loxP		
13	sequence.		
14			
15	The molecule of claim 1 or 2, wherein the second loxP sequence is a mutant		
16	loxP sequence.		
17			
18	4. The molecule of claim 3, wherein:		
19	the second loxP sequence overlaps some or all of the short RNA encoding sequence;		
20	and		
21	the n-terminal nucleotides in the terminus of the second loxP that is proximal to the		
22	short RNA encoding sequence consists of the 5' terminal sequence of the short RNA		
23	encoding sequence, wherein n=1 to 10.		
24			
25	5. The molecule of any one of claims 1-3, further comprising:		
26	a thymidine nucleotide immediately preceding the upstream terminal sequence of the		
27	first $loxP$ , wherein the first $loxP$ is upstream of the termination sequence.		
28			

29	6.	The molecule of any one of claims 1-5, wherein:	
30	the Ri	NA polymerase III promoter sequence comprises genomic sequence of the small	
31	nuclear RNA	U6 promoter or a functional equivalent thereof.	
32			
33	7.	The molecule of claim 6, wherein:	
34	the termination sequence comprises genomic sequence downstream of the small		
35	nuclear RNA	U6 transcription termination signal.	
36		·	
37	8.	The molecule of claim 7, wherein the termination sequence is a modified U6	
38	transcription t	ermination sequence comprising:	
39	some i	number from 1 to 20, inclusive, of additional thymidine nucleotides disposed	
40	immediately a	djacent to the wild-type U6 thymidine termination signal; and	
41	some i	number from 1 to 190, inclusive, of nucleotides encoding the wild-type U6	
42	genomic seque	ence that is immediately downstream of the thymidine termination sequence.	
43			
44	9.	The molecule of claims 7 or 8, wherein the termination sequence further	
45	comprises:		
46	one or	more additional RNA Polymerase III termination signals.	
47			
48	10.	The molecule of any one of claims 1-9, wherein:	
49	the sho	ort RNA encoding sequence encodes a transcript with fewer than 30	
50	nucleotides.	·	
51			
52	11.	A transgenic animal whose genome comprises the nucleic acid molecule of	
53	any one claims	s 1-10.	
54			
55	12.	The transgenic animal of claim 11, further comprising a nucleic acid molecule	
56	encoding a Cre recombinase.		
57			
58	13.	The transgenic animal of claim 12, wherein expression of the Cre recombinase	
59	is development	tally regulated.	

61	14.	The transgenic animal of claim 11, wherein expression of the Cre recombinase		
62	is tissue-specific.			
63				
64	15.	The animal of any one of claims 10-14, wherein the animal is any one of the		
65	following:	a mouse, a rat, a guinea pig, a goat, a pig, a monkey, a baboon, a chimpanzee, a		
66	cow; a rabl	pit; a sheep, dog, a cat, a hamster, a chicken, a frog.		
67				
68	16.	A eukaryotic cell comprising the nucleic acid molecule of any one of claims		
69	1-10.			
70				
71	17.	The cell of claim 16, wherein the cell is an animal cell.		
72				
73	18.	The cell of claim 16, wherein the cell is a mammalian cell.		
74				
75	19.	The cell of claim 17 or 18, wherein the cell is an embryonic stem cell.		
76				
77	20.	The cell of any one of claims 16-19, further comprising a nucleic acid		
78	molecule er	acoding a Cre recombinase gene.		
79				
80	21.	The cell of any one of claims 16-19, further comprising a Cre recombinase		
81	protein.	·		
82				
83	22.	A method of making an inducible short RNA expression system, the method		
84	comprising:			
85	linki	ng two or more nucleic acids to produce the nucleic acid of any one of claims 1-		
86	10.			
87	23.	A method of making a transgenic animal comprising:		
88	intro	ducing the molecule of any one of claims 1-10 into the genome of an embryonic		
89	stem cell;			
90	intro	ducing the embryonic stem cell into an embryo;		

91	implanting the embryo in an animal capable of carrying the embryo to term; and		
92	allowing the embryo to come to term, thereby generating a transgenic animal.		
93			
94	24. The method of claim 23, wherein:		
95	the molecule of any one of claims 1-10 is introduced into the genome of an oocyte;		
96	the oocyte is fertilized to produce an embryo;		
97	the embryo is implanted in an animal capable of carrying the embyo to term; and		
98	the embryo is allowed to come to term, thereby generating a founder transgenic		
99	animal.		
100			
101	25. The method of claim 23, wherein the method generates a chimeric transgenic		
102	animal, and further comprising:		
103	crossing the chimeric transgenic animal to another animal of the same species to		
104	generate a founder transgenic animal whose genome includes the molecule of any one of		
105	claims 1-10.		
106			
107	26. A method of making an animal cell containing an inducible short RNA		
108	expression, the method comprising:		
109	transfecting a cell with the molecule of any one of claims 1-10.		
110			
111	27. The method of claim 26, wherein the cell is a cell from any one of the		
112	following animals: a human, a mouse, a rat, a guinea pig, a goat, a pig, a monkey, a baboon,		
13	a chimpanzee, a cow; a horse, a rabbit; a sheep, a chicken, a dog, a cat, a frog, or a fish.		
14			
15	28. A method of studying gene function in a cell, the method comprising:		
16	providing the cell of any one of claims 16-21;		
17	inducing transcription of the short RNA encoding sequence; and		
18	monitoring changes in the cell.		
19			
20	26. A method of studying gene function in an organism, the method comprising:		
21	providing the transgenic animal of anyone of claims 11-15;		

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122	inducing transcription of the short RNA encoding sequence; and
123	monitoring changes in the organism.
124	
125	